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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,699	12/30/2005	Per Ronnau	PATRADE	9157
James C Wray Suite 300 1493 Chain Bridge Road McLean, VA 22101			EXAMINER TANG, SON M	
			ART UNIT 2612	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/560,699

Applicant(s)

RONNAU, PER

Examiner

SON M. TANG

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/13/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: In claim 6, the claimed "means of suitable software is used in order to predict possible causes of presence of pests, causes of alarm and/or suggest possible actions, and that the collected data is correlated and integrated with the database" is not support in the Specification. It is unclear of how the software is able to predict possible causes of presence of pests? predict possible causes of alarm?.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. **Claim 1**, terms "may" in line 10, "and/or" in line 11 and 12, **claim 5** term "capable" in line 3 are indefinite, they are not appropriate to be used in the claim, because they are not specifically define claimed subject matter.

4. Further more, in claim 1: It is unclear of the claimed "software modules incorporating self-learning in response to generated data and predetermined responses in view of incoming collected data", whereby: 1) what is the generated data? 2) what are the predetermined responses? According to the claimed language and structure, it is not clear what the performing

and results of the software modules incorporating self-learning and the limitation is lack of relationship with the rest of the limitation in the claim.

5. Claim 1 recites the limitation "the type" in line 2, "the collected data" in line 5, "the treated data" in line 11 and "generated data and predetermined responses" in lines 13-14. There is insufficient antecedent basis for these limitations in the claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-9 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner, Jr. et al. [US 6,937,156] in view of Shima [US 7,239,720] and further in view of Cooper et al. [US 6,885,299].

Regarding claim 1: Gardner discloses a pest control system [see Figs. 1 and 3C] comprising:

- one or more detection units (11 or 800) and means (803, 801) as shown in Figs. 3A and 3C are for identifying pest type, whereby, capacitance sensing circuit 803 measures change in electrode of each pest entered grid (801), based on the a characteristic change which to determine the size and type of pest [see Abstract and col. 2, lines 23-33, col. 4, lines 54-61],

- means (14) for electronically communicating the collected data to a local server (16), the local communication server (16) comprises means (15) for receiving input (22) from the

detection units (11) and transmits the input to a central system server (17), which collects and treat data received from one or more discrete remote local communications servers such that the treated data such as store in database (log registration) and generates a report for each of the traps (as cited in col. 6, lines 60-68 and col. 7, lines 5-16),

-software modules is inhered in the system [as cited in col. 11, lines 13-17 and col. 6, lines 52-67], use to response to incoming data received from capacitive sensing device, **Gardner** does not specifically mention that software program is a self-learning program. Shima teaches an optical monitoring apparatus comprises, a software program that is able to decide whether the detected object is a human body, small animal, pest or insect, based upon the detected image [see col. 7, lines 32-60], that is obvious of constituting that the software program is a self-adjusting program that have multiple dynamic threshold levels, which is same as self-learning program. Therefore, it would have been obvious of one having ordinary skill in the art at the time the invention was made to use the self-learning program as suggested by Shima in the pest monitoring system of Gardner, so that the system can be detected and determined more than one type of pests. **Gardner** does not specifically mention that the collected data is being encrypted before transmitted to the local server. Data encryption is known in communication art, that uses to prevent any but the intended recipient from reading that data, which teaches in a locating and monitoring insect of **Cooper et al.**, [as cited in col. 1, lines 34-35 and col. 5, lines 14-15]. Therefore, it would have been obvious of one having ordinary skill in the art at the time the invention was made to employ a data encryption device as suggested by Cooper et al. into the system of Gardner, so that the data transmission can be protected and not be interfered with other signals.

Regarding claim 2: Gardner further discloses the pest is a rodent and sensor 12 is a movement sensor [see col. 5, lines 40-41].

Regarding claim 3: Gardner discloses insect detection sensor is a movement detector (12) [see col. 5, lines 40-41].

Regarding claim 4: Gardner further discloses sensor (12) includes a means for exterminating (kills) pests [col. 5, lines 32-33].

Regarding claim 5: Gardner further teaches that the status report on the current status of the detection unit at predetermined time intervals and can be transmitted directly to computer (16) when action is detected [see col. 9, lines 1-15].

Regarding claim 6: Gardner and Shima made obvious in claim 1 above, wherein, Shima has taught that software program that be able to estimate the type of detected object (e.g. small animal, insect or human) base upon object size and speed. In that suggestion, it is obvious to one having ordinary skill in the art would recognize that software program having dynamic thresholds would be used to classify the type of pests and how the pest being determined.

Regarding claims 7-8: Gardner further discloses that communication between the components in traditional wireless means such as radio frequency or Internet [see Fig. 1, col. 5, lines 56-65].

Regarding claim 9: Gardner, Shima and Cooper made obvious above, Gardner states that the location data is contained with the identification data of the detector unit, but fails to show a GPS unit for determining the position, Cooper et al. further teaches a GPS unit for determining the position of the sensor [see Abstract]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention to employ a GPS unit as suggested by Cooper

et al., so the location of the pest detector can be determined more precisely

Regarding claim 11: Gardner further discloses that the communication between the trap (809) to remote location is via Internet [see col. 9, lines 36-45].

Regarding claim 12: Gardner, Shima and Cooper made obvious above, Shima further teaches that the animal body moving speed is being detected in order to determine what type of animal is being detected, the body moving speed would consider as the activity of an approaching animal/pest toward the detection unit. It would have been obvious of one having ordinary skill in the art at the time the invention was made to implement the activity (moving speed) of that particular pest as suggested by Shima, in the pest identifying process of the combination above, would make the pest identifying process more easier and accurate.

Regarding claim 13: Gardner, Shima and Cooper made obvious above, Shima further teaches that the animal body moving speed is being detected in order to determine what type of animal is being detected, the body moving speed would consider as the physical factors of an approaching animal/pest toward the detection unit. It would have been obvious of one having ordinary skill in the art at the time the invention was made to implement the physical factors (moving speed) of that particular pest as suggested by Shima, in the pest identifying process of the combination above, would make the pest identifying process more easier and accurate.

Regarding claim 14: Gardner further discloses that the database (25) can reside on local computer (16) [see col. 7, lines 1-2], which suggested that the local communication server (16) would includes means for processing and storing said input in an accessible storage medium (such as database).

8. Claim **10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner, Jr. et al., in view of Shima and Cooper et al., and further in view of Roberts [US6,792,395].

Regarding claim 10: Gardner and the combination disclose all the limitations as described above, except for not specifically mention about GSM wireless communication, Roberts teaches a remote detector monitoring system comprises a GSM communication method [col. 5, lines 62-63] which transmits pest or bait related data [see col. 6, lines 41-57]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention to employ a GSM transmission method as suggested by Roberts, as an alternative communication method technology.

9. Claim **15** is rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner, Jr. et al., in view of Shima and Cooper et al., and further in view of Landwehr et al. [US 2005/0025357].

Regarding claim 15: Gardner and the combination made obvious above, except for not specifically mention that digital camera is use for identifying the type of pest. Landwehr teaches a method and system for detecting and classifying objects in images such as insects comprising, a digital camera and software programmed for identifying the type of insect [see the Abstract]. It would have been obvious of one having ordinary skill in the art at the time the invention was made to use digital camera in the detection unit as additional parameter information of pest data, which would make identification process easier and accurate.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. Lee US 7,385,483, Meehan US 4,884,064 and Mafra-NEto et al. US 2003/0069697.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SON M. TANG whose telephone number is (571)272-2962. The examiner can normally be reached on 5/8.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (571)272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ST/

/Daniel Wu/
Supervisory Patent Examiner, Art Unit 2612